Ecological and Cultural Resources and Wind Energy Windiana 2010



- Ecological Consulting
 Native Plant Nursery
- Restoration Services
 Cultural Resource Management



JFNew Overview

Mission

Provide the highest quality environmental services to our clients while positively impacting the lives of our employees and the conservation of natural resources through prosperity and stewardship.

Services

Ecological Site Assessments
Cultural Resource Management
Design
Permitting
Native Plant and Seed Supply
Restoration Implementation

Maintenance and Monitoring

Locations





Ecological and Cultural Resources and Wind

- Wetlands and Streams
- Cultural Resources
- •Wildlife



Wetlands and Streams

State and Federal Permit Requirements

Federal – Clean Water Act - navigable waters and non-isolated wetlands

State – Clean Water Act Section 401 and Indiana Isolated Wetland Law

Summary:

Not a big issue for wind energy
Time required for delineation, planning, and permitting
Lot of opportunity for avoidance and minimization
Mitigation if needed



Cultural Resources

State and Federal Permit Requirements

Federal - The National Historic Preservation Act – Section 106

State and local regulations - Indiana Administrative Code 14-21-1

Archeological Resources
Historical Properties

Summary:

Not a big issue for Wind Energy
Phase 1 surveys needed
Timing and planning critical for schedule
Lot of opportunity for avoidance



Wildlife

Wildlife Impacts are a significant issue for Wind Energy

Some main species of concern and impact:

- Indiana Bat
- Eagles and Hawks
- Whooping Crane
- Prairie Chicken
- Sage Grouse

What is being done?

- Pre Siting surveys
- Avoidance
- Mitigation
- Post Construction Mortality Monitoring
- Research



Indiana Bat

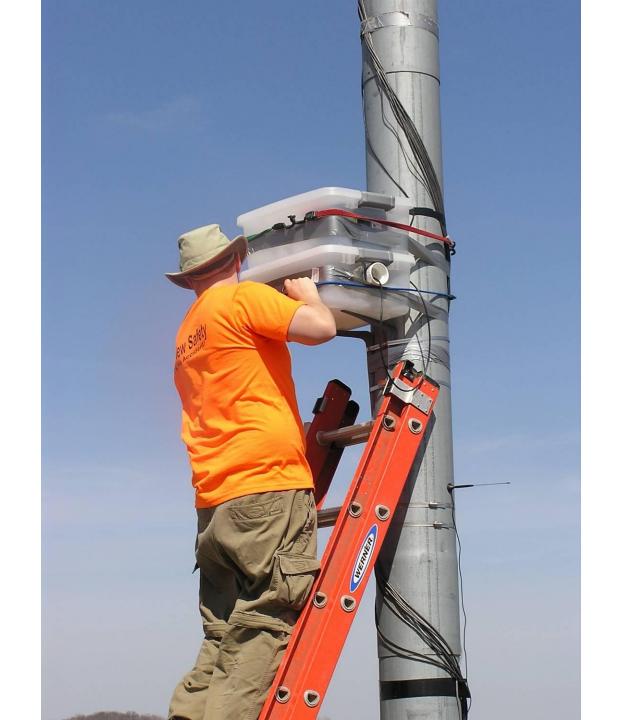
Critical issue for wind development in Indiana
Planning and pre-construction surveys – mist netting and radar
Mitigation options
USFWS habitat conservation plan















Direct Additional Questions to:

Will Ditzler

President and CEO

wditzler@jfnew.com)

Walkerton, Indiana

574-586-3400

www.JFNew.com